Change in Washington Earnings, 1989-1999: A Report Based on the Census

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Full-Time Worker Earnings by Sex: 1989-1999

Erica Gardner

Using data from the 1990 and 2000 five percent Public Use Microdata Sample (PUMS), change in total earnings for full-time workers was examined for Washington State residents aged 18 to 64 by sex.[1] Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment. Both women's and men's full-time earnings increased between 1989 and 1999, but women's full-time earnings grew at a faster rate than men's (see Table 1). Still, men's full-time earnings remained higher than women's full-time earnings.

Table 1 – Total Earnings for Adults Aged 18 to 64 Who Work Full Time: 1990-2000, Adjusted for Inflation (1999 dollars)

	1989	1999	Change 1999-1989	% Change (1999/1989-1)
Men				
Mean	$43,225	$49,929	$6,704	16%
Earnings Percentile				
10th	$15,724	$17,000	$1,2769	8%
25th	$25,418	$26,000	$582	2%
50th	$37,496	$40,000	$2,054	5%
75th	$51,136	$57,000	$5,864	11%
90th	$70,311	$82,000	$11,689	17%
Women				
Mean	$27,470	$34,331	$6,861	25%
Earnings Percentile				
10th	$12,379	$13,600	$1,221	10%
25th	$17,394	$20,000	$2,606	15%
50th	$24,289	$29,000	$4,711	19%
75th	$33,877	$40,600	$6,723	20%
90th	$44,744	$57,000	$12,256	27%

Change in Male Earnings

Men's mean full-time earnings increased 16 percent or $6,704 from $43,225 in 1989 to $49,929 dollars in 1999. Men in the bottom half of the earnings distribution did not experience the same earnings growth that those in the top half experienced. Male earnings at the 10th percentile increased eight percent or $1,276 between 1989 and 1999, from $15,724 to $17,000. This increase may have been at least partly a result of the minimum wage increasing from $3.85 an hour in 1989 to $5.70 an hour in 1999.[3] Male earnings at the 25th and 50th percentiles experienced rather small increases in full-time earnings (two and five percent respectively).

The Washington State data used in this analysis come from the 1990 and 2000 five percent Public Use Microdata Sample, (PUMS). More information on these surveys can be found at the Census website: http://www.census.gov/main/www/pums.html.

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In contrast, men with earnings at the 75th and 90th percentile experienced 11 and 17 percent increases in earnings. The earnings gap between male full-time earnings at the 10th and 90th percentiles grew by 19 percent or $10,413, from $54,587 in 1989 to $65,000 in 1999. The ratio of earnings at the 90th percentile to the 10th percentile also increased from 4.5 in 1989 to 4.8 in 1990. At least part of the strong increase in male mean full-time earnings at the 75th and 90th percentiles was a result of stock options exercised by workers in the software industry.[2]

Change in Female Earnings

Women's mean full-time earnings increased 25 percent or $6,861 from $27,470 in 1989 to $34,331 in 1999. Women's full-time earnings increased by 10 percent or more across all earnings percentiles, but women experienced larger increases in earnings at the top of the earning percentile than at the bottom. There was a 10 percent increase or $1,221 gained among women's full-time earnings at the 10th percentile. Like the men, the increase in earnings experienced by the women at the 10th percentile might be due in part to the increase in the minimum wage during this period.[3]

In contrast, women's full-time earnings increased 27 percent or $12,256 at the 90th percentile. The earnings gap between female full-time earnings at the 10th and 90th percentiles grew by 34 percent or $11,035, from $32,365 in 1989 to $43,400 in 1999. The ratio of female earners at the 90th percentile to female earners at the 10th percentile increased from 3.6 in 1989 to 4.2 in 1999. Income from exercised stock options also helps explain the relatively large increases in earnings for females at the higher end of the income distribution.

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[1] Full-time work is defined as working 35 or more hours a week, 45 or more weeks a year, and having non-zero earnings. Part-time work is defined by non-zero earnings, and working less than 35 hours a week or less than 45 weeks a year. No earnings is simply defined as having zero earnings.

[2] In 1999 the software industry had roughly 27,300 workers making up less than one percent of Washington's workforce. That year the software industry reported 10.3 billion dollars in wages to employment security. If one assumes that the real wage of each of these workers was about $100,000 then about 7.6 billion of these reported wages were a result of stock options. The high earnings of these relatively few workers raised the mean earnings. The full effect of these top earners on mean earnings is minimized somewhat by the fact that the 2000 Census topcoded wage and salary earnings at $336,000 and self-employment earnings at $245,000. Total earnings are the sum of these two values. The 1990 Census also topcoded total earnings at $500,320 (adjusted for inflation).

[3] Washington State Department of Labor and Industries "History of Washington State Minimum Wage" http://www.lni.wa.gov/workplacerights/wages/minimum/history/default.asp